

United States Government

Department of Energy

memorandum

Rocky Flats Field Office

DATE: JUN 26 2000

REPLY TO:
ATTN OF: AMFD:FCG:MSM:00-02916

SUBJECT: Recycled Uranium Project - Final Site Report, Rocky Flats Environmental Technology Site

TO: James J. Fiore, Deputy Assistant Secretary, Office of Site Closure, EM-30, HQ

The purpose of this memorandum is to transmit the final report for the Recycled Uranium (RU) Project for the Rocky Flats Environmental Technology Site (Site). The attached report is being provided in accordance with a directive from the Deputy Secretary of Energy, dated September 15, 1999, which initiated a project to determine the mass flow and characteristics of RU materials at DOE facilities. During its production mission, the Site (formerly the Rocky Flats Plant) was responsible for fabricating and supplying weapon components from both depleted uranium (DU) and highly enriched uranium (HEU) materials. The Site's participation in the RU Project is a result of the extensive production activities involving these materials.

The primary objective of this project was to determine if radiological exposures to workers and the environment may have resulted from processing of RU materials. The content and format of the individual RU project site reports are described in the Project Plan, titled "Historical Generation and Flow of Recycled Uranium in the DOE Complex", dated February 2000, issued by the Office of Environment, Safety and Health (EH). As described by the Project Plan's title, the site reports are expected to provide detailed information concerning the flow of RU materials throughout the DOE Complex.

Based upon a review of Site records, the total quantity of DU material received during the period 1953 through 1993 was 8,029 metric tons uranium (MTU). Of this total, only 2.1 MTU was derived from the RU process. According to analysis from the supplier facility, Fernald Environmental Management Project, this material contained *de minimis* quantities of transuranic constituents and did not present any additional risk of exposure to the workers or the environment.

With regard to HEU, the majority of the material supplied to the Site was weapons grade metal. The HEU metal was high purity material and was not generated by the RU process. The Site did receive 200 kilograms of HEU material in 1955, from the Idaho National Environmental Engineering Laboratory, that was generated by an RU process. The INEEL analysis of this material, which was received in the form of uranyl nitrate, also indicates *de minimis* levels of constituents.

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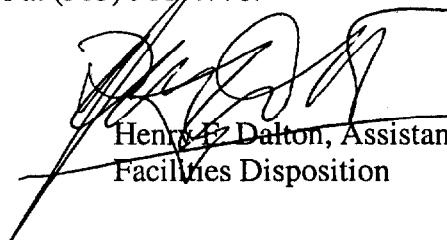
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James J. Fiore
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A Headquarters RU Project Working Group Team reviewed the Site RU Project draft report during a visit on June 21 and 22, 2000. Comments and recommended changes resulting from that review have been incorporated into the Site report.

A copy (electronic and hard copy) has been forwarded to Mark Williams at EH-3. If you have any questions or would like additional information, please contact me at (303) 966-3094 or Matt McCormick of my staff at (303) 966-4776.



Henry B. Dalton, Assistant Manager
Facilities Disposition

cc w/Att:
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